

REMARKS

Claim 2 is currently amended to overcome informalities and not to overcome any art. Applicant respectfully submits that the amendments contained herein are fully supported by the Specification as originally filed and do not contain new matter.

Claim Objections

Claim 2, as currently amended, overcomes the objection thereto.

Claim Rejections Under 35 U.S.C. § 112

Claims 11-16, 21-24, and 30-33 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner asserted that claims 11, 21, and 30 are indefinite because the recited limitations “a first clock divider for generating a first-phase clock signal from a first input clock signal, an input port of the first clock divider connected to a first inverter for receiving the first input clock signal” is unclear. Specifically, the Examiner asserted that it was not clear which preferred embodiment was referred to by those claimed limitations.

The recited limitations of each of claims 11, 21, and 30: “a first clock divider for generating a first-phase clock signal from a first input clock signal, an input port of the first clock divider connected to a first inverter for receiving the first input clock signal” are supported by at least Figure 1 of the drawings. Specifically, Figure 1 shows a first clock divider (102) for generating a first-phase clock signal (PH0) from a first input clock signal (clk), an input port (120) of the first clock divider (102) connected to a first inverter (118) for receiving the first input clock signal (clk). Therefore, Applicant submits that claims 11, 21, and 30 each meet the conditions of 35 U.S.C. §112, second paragraph, so claims 11, 21, and 30 should be allowed.

The Examiner indicated that claims 12-16, claims 22-24, and claims 31-33 were rejected due to their respective dependencies on claims 11, 21, and 30. Therefore, since each of claims 11, 21, and 30 is allowable over 35 U.S.C. §112, second paragraph, claims 12-16, claims 22-24, and claims 31-33 should be allowable over 35 U.S.C. §112, second paragraph, for at least the same reason.

Claim Rejections Under 35 U.S.C. § 102

Claims 1-3 were rejected under 35 U.S.C. § 102(b) as being anticipated by Gorisse (U.S. Patent No. 5,349,622). Applicant respectfully traverses.

Claim 1 includes a first logic gate connected to an output port of a first clock divider for generating a first-phase clock signal from a first input clock signal. Connected in this sense means that an output of the output port of a first clock divider is indicative of an input received at the first logic gate (see Figure 1 and paragraph [0026] of the Specification). Gorisse does not include this.

The Office Action cited above has identified Gorisse's flip-flop B₂ as corresponding to the first clock divider of claim 1, Gorisse's inverting OR-gate 2 as corresponding to the first logic gate of claim 1, and Gorisse's flip-flops B₃, B₄ as corresponding to the second clock divider of claim 1. However, Gorisse's inverting OR-gate 2 is not connected to an output port of Gorisse's flip-flop B₂ in the same sense that the first logic gate is connected to the output port of the first clock divider of claim 1. That is, the output (O₂) of flip-flop B₂ is not indicative of the input (O₃) of inverting OR-gate 2 (see Figures 3 and 4). Therefore, Gorisse does not include each and every limitation of claim 1, so claim 1 should be allowed.

Claims 2-3 depend from claim 1 and are thus allowable for at least the same reason as claim 1. Therefore claims 2-3 should be allowed.

Claim Rejections Under 35 U.S.C. § 103

Claims 17 and 25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Gorisse (U.S. Patent No. 5,349,622). The Examiner indicated that it would have been obvious to one of ordinary skill to use the multiphase clock generator taught by Gorisse in a memory system of Manning (U.S. Patent No. 6,029,252). Applicant respectfully traverses.

Claims 17 and 25 each include a first logic gate connected to an output port of a first clock divider for generating a first-phase clock signal from a first input clock signal. Connected in this sense means that an output of the output port of a first clock divider is indicative of an input received at the first logic gate (see Figure 1 and paragraph [0026] of the Specification). Neither Gorisse nor Manning, alone or in combination, include or suggest this.

The Office Action cited above has identified Gorisse's flip-flop B₂ as corresponding to the first clock divider of claim 17 or 25, Gorisse's inverting OR-gate 2 as corresponding to the first logic gate of claim 17 or 25, and Gorisse's flip-flops B₃, B₄ as corresponding to the second clock divider of claim 17 or 25. However, Gorisse's inverting OR-gate 2 is not connected to an output port of Gorisse's flip-flop B₂ in the same sense that the first logic gate is connected to the output port of the first clock divider of claim 17 or 25. That is, the output (O₂) of flip-flop B₂ is not indicative of the input (O₃) of inverting OR-gate 2 (see Figures 3 and 4). Therefore, Gorisse does not include each and every limitation of claim 17 or 25. Moreover, Manning in combination with Gorisse fails to overcome the deficiencies of Gorisse with respect to claim 17 or 25. Therefore, claims 17 and 25 are allowable over Gorisse and Manning, alone and in combination.

Allowable Subject Matter

Claims 4-10, 18-20, and 26-29 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form, including all of the limitations of the base claim and any intervening claims. Applicant has not rewritten claims 4-10, 18-20, and 26-29. Claims 4-10 depend from claim 1 and are thus allowable for at least the same reason as claim 1. Claims 18-20 depend from claim 17 and are thus allowable for at least the same reason as claim 17. Claims 26-29 depend from claim 25 and are thus allowable for at least the same reason as claim 25. Therefore, claims 4-10, claims 18-20, and claims 26-29 should be allowed.

Applicant acknowledges that claims 34-39 were allowed.

CONCLUSION

In view of the above remarks, Applicant believes that the claims are in condition for allowance and respectfully requests a Notice of Allowance be issued in this case. If the Examiner has any questions regarding this application, please contact the undersigned at (612) 312-2208.

Respectfully submitted,

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